#### Foreword

#### **How Forecasts** Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and dally data are used to project snowmelt runoff.

#### For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

IIIG	Westelli	Statos.	Historical	311011	ourroj	uuis
STA	TE	Α	DDRESS			

201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687 Alaska

201 East Indianola, Sulte 200, Phoenix, AZ 85012 Arlzona

2490 West 26th Ave., Denver, CO 80211 Colorado 517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102

New Mexico 304 North 8th Street, Room 345, Boise, ID 83702 Idaho

10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715 Montana

1201 Terminal Way, Room 219, Reno, NV 89502

1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208 Oregon

4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147 Utah

360 U.S. Court House, Spokane, WA 99201 Washington

Federal Building, 100 East "B" Street, Casper, WY 82601 Wyoming

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soll Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soll Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

#### Published by other agencles:

Nevada

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

## Utah Water Supply Outlook

and

Federal - State - Private Cooperative Snow Surveys

#### Issued by

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#### Released by

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#### in cooperation with

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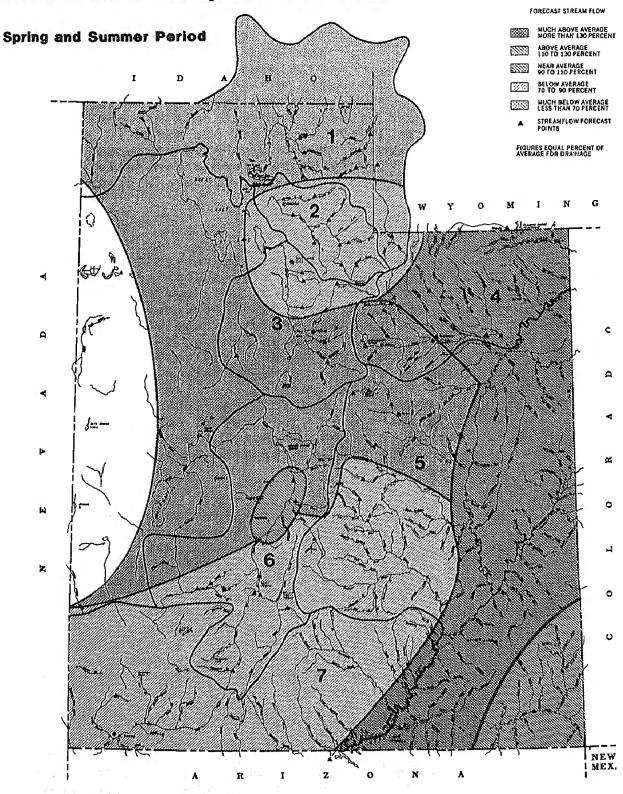
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Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin.

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### Streamflow Prospects for Utah



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#### GENERAL OUTLOOK

#### SUMMARY:

Heavy, late February snowfall improved the snowpack in southern and eastern Utah but only brought the snowpack up to 70-80% of normal for March 1. Northern Utah watersheds have only 65-70% of normal snow water. Streamflow forecasts remain generally below average but reservoir storage is above average in most areas.

#### SNOWPACK:

The snowpack across the State increased 10% more than usual during February. The increases, however, were not evenly distributed. Bear and Weber River watersheds only received about 80% of the usual February increase while southeastern Utah received almost 75% more than the normal increase during the month. Snow surveys conducted near March 1 indicate the snowpack is still below to much below normal in most areas of the State. Increases ranging from 171 to 336% of normal would be required in March just to bring the snowpack to average by the first of April. With normal increases in March the April 1 snowpack will only range from 64 to 87% of average across the State.

#### PRECIPITATION:

Precipitation at mountain stations ranged from generally below normal on the Bear and Weber River watersheds to above to much above normal over the remainder of the State. Valley precipitation ranged from less than 50% of normal on some of the stations in northeastern Utah to almost 250% of normal in the southeastern area of the State. Seasonal precipitation, October-February, ranges from less than 50% on a strip from Bear Lake south to the Spanish Fork drainage to 50-80% in western and the remainder of northern Utah. The eastern half of the State ranges from near to above normal.

#### RESERVOIRS:

Stored water in 26 key reservoirs in Utah is 127% of average for the end of February. All reservoirs sampled which have established averages were above average except Hyrum which was 93% of average. About one-quarter of the reservoirs sampled were reported as full. The only area where filling is doubtful and water shortages are likely is in extreme southwestern Utah where late February storms have helped but much more is needed.

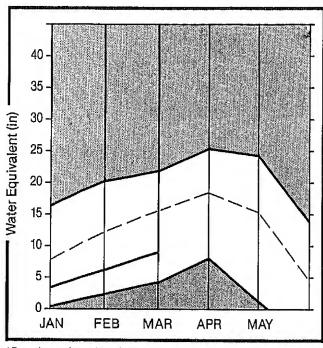
#### STREAMFLOW:

Forecasts of spring and summer streamflow are still generally below to much below average. Some stations on the Sevier are still forecast above average, however, as are the Colorado and San Juan Rivers. Most forecasts are slightly higher than last month but forecasts on the Ogden, Provo R.-Utah Lake, Jordan, and Price Rivers have been reduced, Major streams which originate outside of Utah, namely the Colorado, Green and San Juan Rivers, have slightly lower forecasts than a month ago.

Forecasts prepared for this bulletin represent cooperative efforts of the Soil Conservation Service and the National Weather Service in an effort to provide the best possible service to water users and managers.

#### **Bear River Basin**

#### Mountain snowpack\* (inches)



\*Based on selected stations

Maximum	Average	
Minimum	Current	D-17-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1

#### WATER SUPPLY OUTLOOK:

Snowpack on the Bear River watershed increased only about 80% as much as usual during February. March 1 snow surveys indicate Bear River snowpack is only 57% of average. Logan River snowpack is 48% of normal. Streamflow forecasts are generally the same or slightly greater than last month with the exception of Cub River which decreased slightly. Forecasts range from 27 to 82% of average, Reservoir storage is good with all reservoirs near to much above average for the end of February.

For more information contact your local Soil Conservation Service office: Tremonton Field Office 801-257-5403 Logan Field-Office 801-753-5616

#### BEAR RIVER BASIN

FORECAST POINT		25 YR. AVG.	MOST PROBABLE	MOST PROBABLE	REAS.		EAS, IN.	REAS.	
BEAR RIVER near UT-WY Stateline	APR-JUL	116.0	95.0	82	121,0	104	74.0	64	
BEAR near Woodruff	APR-JUL	144.0	88,0	61	144.0	100	55.0	38	
HOODRUFF CREEK near Hoodruff	APR-JUL	17.3	9.5	55	14.0	81	5.0	29	
BIG CREEK near Randolph	APR-JUL	5.3	3,0	57	6.0	113	1.0	19	
BEAR near Randolph	APR-JUL	126.0	7010	56	141.0	112	25.0	20	
THOMAS FORK near Stateline	APR-SEP	37.0	10,0	27	19.0	51	1.0	3	
SMITHS FORK near Border	APR-SEP	122.0	65.0	53	94.0	77	34.0	30	
BEAR RIVER near Harer	APR-SEP	324.0	150.0	46	241.0	74	72.0	22	
LOGAN RIVER near Logan	APR-JUL	122,0	B0.0	66	103.0	84	59.0	48	
BLACKSMITH FORK near Hyrum	APR-JUL	57.0	35.0	61	54.0	95	17.0	30	
LITTLE BEAR RIVER near Paradise	APR-JUN	42,0	27.0	64	43.0	102	11.0	26	
CUB RIVER near Preston	APR-JUL	46.8	25.0	53	43.0	92	14.0	30	
			1000AF)	1   	THE SEASON SAME AND AND AND AND AND AND	WATERSHED			nii lidd diad afan ban llan dar anii bai ban d
RESERVOIR	USEABLE   CAPACITY!		BLE STORAG LAST YEAR	E XX	HATERSHED		NO. COURS AVG'D	THIS Y	EAR AS % O
BEAR LAKE					BEAR RIVER	, UPPER IN UT		47	# PM FO 100 DO 500 DO 400 PM
YRUM			10.7	i i		, LOWER IN UT		35	100000000000000000000000000000000000000
PORCUPINE	11.3	10.8		1	BEAR RIVER	DRAINAGE IN	UT 13	38	
HOODRUFF NARROWS	55.8	50.0	34.2	ı	BEAR RIVER	, UPPER (abov	/e 12	44	64
HOODRUFF CREEK	3.5	3,6		1		LOWER (belo		34	52
				ı I	BEAR RIVER		27	37	56
					LOGAN RIVE		5	32	48
					RAFT RIVER		3	51	63
				I	BEAR RIVER		32	39	57

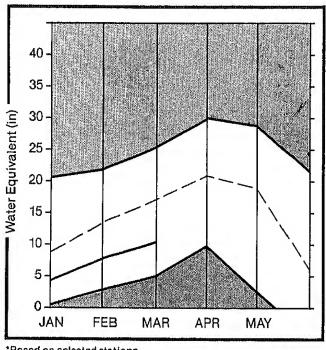
<sup>1 -</sup> Reas, max, and reas, min, forecasts are for 5% and 95% exceedance levels and also (2) below.

<sup>2 -</sup> Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

### Weber & Ogden Watersheds

#### Mountain snowpack\* (inches)



\*Based on selected stations

Maximum	Average	
Minimum	Current	-

#### WATER SUPPLY OUTLOOK:

Weber River snowpack, relative to average, is slightly improved from last month. The Ogden River, however, went from 63% of average on February 1 to 56% on March 1. April 1 snowpack will only end up at 70% of average if March precipitation is normal. Forecasts of spring and summer streamflow followed the snowpack trends. Weber River forecasts increased slightly while forecasts on the Ogden River decreased. Fore- casts range from 64 to 87% of average. Reservoir storage is 82% of capacity and 135% of average.

or more information contact your local Soil Conservation Service office: Layton Sub Office 801-544-9144

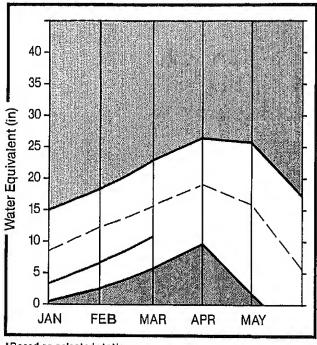
#### WEBER & OGDEN WATERSHEDS in Utah

FORECAST POINT	FORECAST PERIOD	AVG.	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)		REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS, HIN, (% AVG.)		
WEBER RIVER near Oakley	APR-JUN	107.0	85.0	79	112.0	105	61.0	57		
ROCKPORT RESERVOIR inflow	APR-JUN	120.0	84.0	72	128.0	107	50.0	42		
CHALK CREEK near Coalville	APR-JUN	41.0	32.0	78	45.0	110	20.0	49		
WEBER RIVER near Coalville	APR-JUN	127,0	71.0	72	128.0	101	58.0	46		
LOST CREEK near Croyden	APR-JUN	15,6	11.0	71	18.0	115	4.0	26		
EAST CANYON CREEK near Morgan	APR-JUN	29.0	21.0	72	31.0	107	13.0	45		
HARDSCRABBLE CREEK near Porterville	APR-JUN	18.4	16,0	87	25.0	136	7.0	38		
SOUTH FORK OGDEN RIVER near Huntsvil	MUL-94A	58.0	40,0	69	54.0	93	24.0	41		
PINEVIEW RESERVOIR inflow	APR-JUN	122.0	78,0	64	102.0	84	49.0	40		
WHEELER CREEK near Huntsville	APR-JUN	6:3	4.2	67	5.0	79	3.0	48		
ECHO RESERVOIR inflow	APR-JUN	163.0	12070	74	167.0	102	78.0	48		
WEBER RIVER at Gateway	APR-JUN	328,0	225.0	69	300.0	91	150.0	46		
FARMINGTON CREEK near Farmington	APR-JUL	872	5.7	70	10.0	122	2.0	24		
RESERVOIR	STORAGE	bussia	1000AF)	 		WATERSH	ED SNOHPA	CK ANALYSIS		
	USEABLE I		BLE STORAG	GE **		,	₩О.		YEAR	AS % OF
RESERVOIR	CAPACITY!	THIS YEAR	LAST YEAR	AVG, I	HATERSHED		AVG	RSES 'D LAST	YR,	AVERAGE
CAUSEY	6,9	4,4	3,5	2,3	OGDEN RIV	R	4	39		56
EAST CANYON .	48.1	4974	4315	3576	HEBER RIVE	:R	14	46		67
ECHO	73.9	6314	4610	49.5	HEBER & OC	DEN WATERS	HEDS 18	4.4		69
LOST CREEK	20.0	17:16	12,3	13,4						
PINEVIEW	110.1	6318	9417	48.7					, ign	
ROCKPORT	60.9	42.0	3978	3012						
				1				10.4		

 <sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

### Utah Lake, Jordan River & Tooele Valley

#### Mountain snowpack\* (inches)



\*Based on selected stations

Maximum Average ————
Minimum Current ———

#### WATER SUPPLY OUTLOOK:

Snowpack increased 26% more than usual during February over the Utah Lake-Jordan River and Tooele Valley watersheds. Snowpack now ranges from 58% of the March 1 average on the Provo River to 89% for the Tooele Valley watersheds. Streamflow forecasts are generally slightly less or equal to last month with the exception of Strawberry Res. Inflow which increased slightly. Forecasts range from 50 to 96% of average. Reservoir storage is 130% of the end of February average.



### UTAH LAKE, JORDAN RIVER & TOOELE VALLEY

#### STREAMFLOW FORECASTS

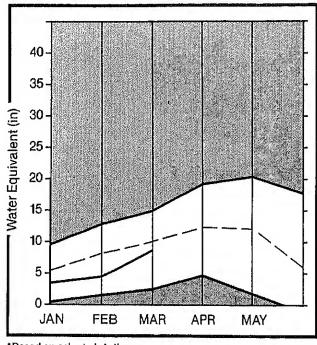
FORECAST POINT	FORECAST PERIOD	25 YR. AVG.	HOST	MOST PROBABLE		REAS. MAX.	REAS. MIN.	REAS. HIN. (% AVG.)	
PROVO near Hailstone	APR-JUL	113.0	B2.0	73	115.0		55.0	49	
PROVO below Deer Creek Dam	APR-JUL	13310	90.0	86	125.0	94	51,0	38	
AMERICAN FORK near American Fk.	APR-JUL	34.0	27.0	79	33.0	97	23.0	88	
HOBBLE CREEK near Springville	APR-JUL	23,3	12.0	52					
STRANBERRY RESERVOIR inflow	APR-JUL	60.0	41.0	6B	54.0	90	27.0	45	
PAYSON CREEK near Payson	APR-JUL	7,3	415	62					
UTAH LAKE inflow	APR-JUL	295.0	28010	95	363.0	123	200.0	68	
LITTLE COTTONWOOD CRK near SLC	APR-JUL	41.0	3010	73	37.0	90	25.0	61	
BIG COTTONWOOD CRK mear SLC	APR-JUL	39,0	3610	92	40.0	103	29.0	74	
PARLEY'S CEEK near SLC	APR-JUL	17.0	12,5	74	18.0	106	9.0	53	
MILL CREEK near SLC	APR-JUL	6.9	6.6	96	9.0	130	5.0	72	
EMIGRATION CREEK near SLC	APR-JUL	4,6	216	57					
CITY CREEK near SLC	APR-JUL	9.0	6.3	70	8.0	89	5.0	56	
SETTLEMENT CREEK near Tooele	APR-JUL	2.3	1.8	78	3,0	130	0.5	22	
SOUTH WILLOW CREEK near Grantsville	APR-JUL	3,0	1.19	63	4.0	133	0,5	17	
VERNON CREEK near Vernon	APR-JUN	1.2	016	50	1,3	107	0,2	16	
RESERVOIR	STORAGE	11 / 12 / 13 / 13 / 13 / 13 / 13 / 13 /	1000AF)	     	ren dere den 3rd det dill dill der som un			K ANALYSIS	
RESERVOIR			BLE STORAG LAST YEAR	E **     AVG.	HATERSHED		NO. COUR AVG'	SES	YEAR AS % OF
DEER CREEK	149.7	130.1	139,3	95.5	PROVO RIVE	R & UTAH L	AKE 10	41	56
GRANTSVILLE	3.3	312	2,3		PROVO RIVE	R	5	37	58
SETTLEMENT CREEK	1.0	0.9	0.8	0.5	JORDAN RIV	ER & GREAT	SALT 6	67	81
STRANBERRY-ENLARGED	951.4	689.3	954,7		TOOELE VAL	LEY WATERS	HEOS 4	104	89
JTAH LAKE	883.9	893.0	.058.7	689.4	UTAH LAKE,	JORDAN RI	VER & 20	58	71
VERNON CREEK	0.6	0.6	0.5	0.5		- :			

<sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

### Uintah Basin & Dagget SCD's

#### Mountain snowpack\* (inches)



\*Based on selected stations

Maximum	Average	
Minimum	Current	

#### WATER SUPPLY OUTLOOK:

Snowpack increase during February was 157% of normal. March I snowpack on the Uintas ranges from 47% of average on the Strawberry River to 126% of average on Sheep Creek. Streamflow forecasts for streams originating in Utah have generally increased from the levels forecast last month reflecting the improved snowpack picture. Forecasts range from 61 to 105% of average. Reservoir storage in reservoirs for which an average is established ranges from 143 to 166% of normal for this time of year.

for more information contact your local Soil Conservation Service office; Rossevelt Field Defice - 801-722-4621

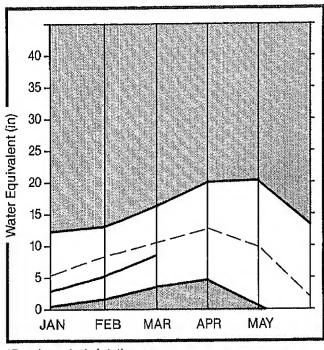
#### UINTAH BASIN & DAGGET SCD'S

FORECAST POINT	FORECAST PERIOD	AVG, (1000AF)	MOST PROBABLE (1000AF)	PROBABLE (% AVG.)	MAX.	REAS. MAX. (% AVG.)	MIN.	REAS. MIN. (% AVG.)	
DUCHESNE RIVER near Tabiona	APR-JUL	105.0	88.0	84	105.0	100	68.0	65	, _ <u>, , , , , , , , , , , , , , , , , ,</u>
DUCKESNE RIVER near Duchesne	APR-JUL	189.0			192.0		116.0		
STRAMBERRY RIVER at Duchesne	APR-JUL	69.0		61		81			
ROCK CREEK near Mountain Home	APR-JUL	95.0		88	107,0		67.0	71	
CURRANT CREEK near Fruitland	APR-JUL	20.0		86			9,0	45	
LAKEFORK RIVER near Mountain Home	APR-JUL		62.0	87	80.0		47.0	67	
YELLOWSTONE RIVER near Altonah	APR-JUL		62.0	94	86+0		38.0	58	
DUCHESNE near Myton	APR-JUL	223,0		74	234.0		78,0	35	
WHITE ROCKS RIVER near Whiterocks	AFR-JUL		63.0	105	88+0			63	
UINTAH RIVER near Neola	APR-JUL	86.0		97	118.0	137	48.0	56	
DUCHESNE near Randlett	APR-JUL	257.0	200.0	78	382.0		18.0		
WEST FORK DUCHESNE RIVER near Hanna			20,0	71		89	14.0	50	
HENRY'S FORK near Manila		51.0		92	67.0		31.0	61	
BLACK'S FORK near Millburne		90.0		87	110.0		50.0	56	
FLAMING GORGE RESERVOIR inflow			110010		1476.0		768.0	53	
ASHLEY CREEK near Vernal	APR-JUL		51.0		64+0	123	41.0	79	
RESERVOIR				•					
RESERVOIR	1	YEAR	YEAR	AUG. I			AVG1	SES D LAST	YR. AVERAG
FLAHING GORGE	3749.0	2969,3	295870		UPPER GREE	N RIVER in	U1AH 13	77	95
MODN LAKE	35.8	27.9	21.8	16.8	ASHLEY CRE		2	71	85
RED FLEET	26.0	17.5	20.7		BLACK'S FO	RK RIVER	3	76	96
BTEINAKER	33.3	32.2	32.6	21.1	SHEEP CREE	K	2	114	126
STARVATION	165.3	160.3	147.3	112.1	DUCHESNE R	IVER	16	. 46	71
STRANBERRY-ENLARGED	951,4	689.3	354.7		LAKE FORK-	YELLOWSTON	E CRE 3	45	82
			116		STRANBERRY	RIVER	4	31	47
		9.5	2.44		UINTAH-WHI	TEROCKS RI	EVERS 4	54	82
					UINTAH BAS	IN & DAGGE	T SCD 29	57	80

 <sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

### Carbon, Emery, Wayne, Grand, and San Juan Co.

#### Mountain snowpack\* (inches)



\*Based on selected stations

MaxImum Average ---
Minimum Current ----

#### WATER SUPPLY OUTLOOK:

Southeastern Utah snowpack improved during February especially on the Blues and La Sals where the snow-pack is now greater than average for March 1. Snow-pack now ranges from 51% of average on the Price River to 132% on the La Sal Mountains. Streamflow forecasts for Utah streams north of Cottonwood Creek have decreased while those south of Cottonwood Creek have increased from last month. Forecasts now range from 46 to 119% of average. All reservoirs for which data are available are reporting above average.

For more information contact your local Satt Conservation Service office: Price Field Office 801-637-0041

#### CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.

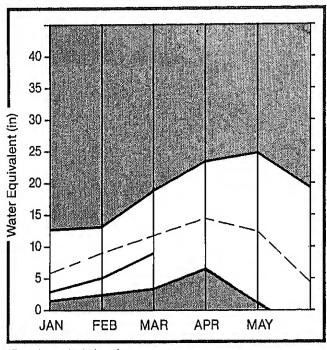
FORECAST POINT	FORECAST	25 YR. AVG.	MOST PROBABLE	MOST PROBABLE	REAS.	REAS, MAX,	REAS. MIN.	REAS. MIN.
	PERIOD	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(% AVG.)	(1000AF)	(% AVG1)
GOOSEBERRY CREEK near Scofield	APR-JUL	12.0	6.6	55	11.0	92	3.0	25
SCOFIELD RESERVOIR inflow	APR-JUL	46.0	24.0	52	36.0	78	14.0	30
PRICE near Heiner	APR-JUL	78.0	36.0	46				
HUNTINGTON CREEK near Huntington	APR-JUL	55.0	33.0	60	48.0	87	23.0	42
COTTONWOOD CREEK near Orangeville	APR-JUL	47.0	92.0	68	48.0	102	16.0	34
FERRON CREEK near Ferron	APR-JUL	41.0	2810	68	43.0	105	13.0	32
MUDDY CREEK near Emery	APR-JUL	21.0	15.0	71	23.0	110	7.0	33
COLORADO near Cisco, UT	APR-JUL	3443.0	3500.0	102	4877.0	142	2433.0	71
GREEN near Green Rv., UT	APR-JUL	3176.0	2800.0	88	3658.0	115	1942.0	61
MILL CREEK near Moab	APR-JUL	5.5	6.0	109	8.0	145	4,0	73
NAVAJO RESERVOIR inflow	APR-JUL	764.0	825+0	108	1138.0	149	558.0	73
SAN JUAN near Bloff, UT	APR-JUL	1091.0	1300.0	119	1813.0	166	875.0	80
SEVEN MILE CREEK near Fish Lake	APR-JUL	6,5	5.5	65	8.0	123	3.0	46
RESERVOIR		(		     				CK ANALYSIS
RESERVOIR	USEABLE   CAPACITY!	** USEA	BLE STORAG	E xx 1	WATERSHED		NO. COUR	

	RESERVOIR STORAGE (1000AF)				HATERSHED SNOWPACK ANALYSIS					
RESERVOIR		USEABLE   CAPACITY!	THIS LAST		WATERSHED	NO. COURSES AVG'D	THIS	YEAR AS	% OF ERAGE	
HUNTINGTON NORTH		3,9	YEAR 470	YEAR 2,9	AVG. 1	PRICE RIVER	3	37		i
JOE'S VALLEY		54.6	4518	38,3	44.6	SAN RAFAEL RIVER	7	48	6	
KEN'S LAKE		2.3	0.9	1,3		MUDDY RIVER	2	46	5	å
HILL SITE		16.7	12.0	9.2	4.0	FREMONT RIVER	4	85	9	1
SCOFIELD		65.8	52.7	4913	32,2	LASAL MOUNTAINS	2	130	13	2
	· ·					BLUE MOUNTAINS	2	107	10	
						WILLOW CREEK - WHITE RIV	17	0		
7	····		1.6 (1.1)			CARBON, EMERY, WAYNE, GR	A 21	65	. 7	P

<sup>1 -</sup> Reas, max, and reas, min, forecasts are for 5% and 95% exceedance levels and also (2) below.
2 - Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

### Sevier & Beaver River Basins

#### Mountain snowpack\* (inches)



\*Based on selected stations

Maximum	Average	
Minimum	Current	<del></del>

### WATER SUPPLY OUTLOOK:

Snowpack on the Sevier River watershed increased 30% more than usual during February. If March precipitation is normal April 1 snowpack should be about 80% of average. Snowpack percentages now range from 68% on the Lower Sevier to 89% on the East Fork. Water supply forecasts have generally increased from last month except for Ephraim Creek and Pleasant Creek which are substantially less. Reservoir storage is reported at 95% of capacity and 176% of average. Gunnison and Otter Creek are full.

Par more information contact your local Soil Conservation Service office: Ricoffeld Field Office: 801-896-6261 Fillmore Field Office: 801-743-6655

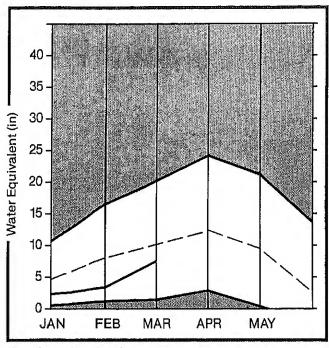
#### SEVIER & BEAVER RIVER BASINS

FORECAST POINT	FORECAST PERIOD	AVG, (1000AF)		MOST PROBABLE (% AVG.)		REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS, MIN, (% AVG	.)			
SEVIER at Hatch	AFR-JUL	52.0	45.0	87	65.0	125	29.0	56				
SEVIER near Circleville	APR-JUL		41.0									
SEVIER near Kingston	AFR-JUL	34.0	27.0	79	54.0	159	7.0	21				
ANTIMONY CREEK near Antimony	APR-JUL	8.9	7,1	80								
E F SEVIER near Kingston	APR-JUL	24.0	23.0	96	38.0	158	14.0	58				
SEVIER blw Pivte Dam	APR-JUL	54.0	50,0	89	87.0	155	19.0	34				
CLEAR CREEK near Sevier	APR-JUL	22.0	15.0	68								
SIGURD to GUNNISON	APR-JUL	44.0	76,0	173	116.0	264	39.0	89				
KINGSTON to VERMILLION DAM	APR-JUN	40.0	50.0	125								
VERMILLION DAM to GUNNISON	MAR-JUN	54,0	86.0	159								
SALINA CREEK at Salina	APR-JUN	18.2	9,1	50								
SEVIER or Gunnison	APR-JUL	99.0	120.0	121								
CHALK CREEK near Fillmore	APR-JUL	16.4	10.0	61	16.0	98	4.0	24				
CHICKEN CREEK near Levan	APR-JUL	3.5	2.2	63	3.0	86	1.0	29				
OAK CREEK near Oak City	APR-JUL	1.6	0.8	50	2.0	125	0.3	19				
EPHRAIM CREEK near Ephraim	APR-JUL	25.0	10.5	42								
PLEASANT CREEK near Pleasant	APR-JUL	11.5	5,5	48								
SALT CREEK near Nephi	APR-JUL	13.5	8.8	65	19.0	141	4.0	30				
BEAVER RIVER near Beaver	APR-JUL	27.0	22,0	81	36.0	133	10.0	37				
NORTH CREEK near Beaver (combined N	APR-JUL	14.6	12,4	85	24.0	164	1.0	7				
MINERSVILLE RESERVOIR inflow	APR-JUN	8.9		90	12.0	135	4.0	45				
RESERVOIR	STORAGE		1000AF)	       		Watershe	D SNOWPA	CK ANALY	 SIS			
ه به ۱۹۱۰ که که سند که خلا اسا شدر پیدا زین پی ایوز پین پین وی بین پین پین پین پین بین سر سنز بیان اوا شد خلک آنوا شد شاه تا ۱۹	USEABLE !		BLE STORAG				NO.		HIS	YEAR	AS %	OF
RESERVOIR	CAPACITYI I	THIS YEAR	LAST YEAR	AVG. I	WATERSHED		AVG	RSES 'D L	AST	YR.	AVER	AGE
GUNNISON	20.3	2013	18.0	14.0	UPPER SEVI	(ER RIVER (	south 11	9.00	E. 19 3 4	W. Col	S. 27. 160	
HINERSVILLE (RKyFd)	26.0	21.0	2012	12.9	EAST FORK	SEVIER RIVE	:R 4	The second	01		89	And The Con-
DTTER CREEK	52,6	52.6	5210	31,2	SOUTH FORK	SEVIER RIV	ER 7	A STATE OF THE STA	93		81	West State
PIUTE	71.8	63+6	6617	41/5	LOWER SEVI	(ER RIVER (i	nelu 12	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	66		68	
SEVIER BRIDGE	236.0	227 (6	23179	119.6	BEAVER RIV	PER	3	April 1997	53		77	
PANQUITCH LAKE	22.3	17.15	19,2		SEVIER & E	BEAVER RIVER	BAS 26	A company of the comp	72		74	

 <sup>1 -</sup> Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.
 2 - Corrected for upstream diversions or changes in reservoir storage.
 The average is computed for the 1961-85 base period.

### E. Garfield, Kane, Washington, & Iron Co.

#### Mountain snowpack\* (inches)



\*Based on selected stations

Maximum	Average	
Minimum	Current	

#### WATER SUPPLY OUTLOOK:

During February the snowpack in southwestern Utah increased 74% more than usual bringing the regional snowpack to 73% of average for March 1. The heavy storm in the last week of the month raised individual snow course percentages from 12 to 68% from pre-storm levels with the greatest increases occurring on the Enterprise-New Harmony drainages. Local streamflow forecasts now range from 70 to 74% of average. Gunlock and Quail Creek reservoirs are up to about 60% of capacity.

or more information contact pene incal Soil Conservation Secretae editoe: 7 Campaint Exercises editoe: 86)258622029

#### E. GARFIELD, KANE, WASHINGTON, & IRON Co.

FORECAST POINT	FORECAST PERIOD	AVG.	MOST FROBABLE (1000AF)			REAS.	REAS.	IM	н,		
	LEKTON	(1000HF)	(TOUGHE)	(% HVG;)	(1000HF/	(% HAR!)		Hr) (%	HVU+/		
VIRGIN near Hurricane	APR-JUN	68.0	50.0	74	75.0	110	2	3.0	34		
SANTA CLARA near Pine Valley	APR-JUN	5.0	3.6	72							
COAL CREEK near Cedar City	APR-JUL	20.0	14,0	70	22.0	110		9.0	45		
LAKE POWELL inflow	APR-JUL	8084.0	7500.0	93	10411.0	129	499	0,6	62		
RESERVOI				1							
	USEABLE	xx USEA	** USEABLE STORAGE		444			но.	THIS	YEAR	AS % OF
RESERVOIR	CAPACITY		LAST YEAR	AVG. 1	HATERSHED			COURSES AVG'D		HIS YEAR AST YR.	AVERAGE
GUNLOCK	10.4	6,4			VIRGIN RI			5	-72		60
LAKE POWELL	25002.0	21570.0 2	2444.0		PAROHAN			4	124		95
QUAIL CREEK	40,0	24.0			ENTERPRIS	E TO NEW H	ARMONY	2	169		54
UPPER ENTERPRISE		NO REPOR	iT.		COAL CREE	К		3	75		65
LOWER ENTERPRISE		NO REPOR	ıı		ESCALANTE	RIVER		2	167		160
					E. GARFIE	LD, KANE,	ИАЅНІЮ	12	95		73
4-14-15-16-16-16-16-16-16-16-16-16-16-16-16-16-										بالديد	d

<sup>1 -</sup> Reas, max, and reas, min, forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

# SNOW MEASUREMENT DATA

SMON COURE						
SNOW COURSE	ELEV.	DATE	SNOW	WATER	LAST	AVERAGE
					YEAR	1961-85
ASHLEY TWIN LAKES	10500	03/04	48	10.1	14.9	13.6
ATWOOD LAKE	10500	03/04	39	8.6	14.9 13.8	9.7
BEAVER CREEK DIVIDE BEAVER DAMS	8280	02/28	29 28	7.1	17.9	10.8
BEN LOMOND PEAK	0008 0008	02/25	28	7.0	10.4	10.5
BEN LOMOND TOAT	8000	02/26	74 38	20.8 10.2	47.7	31.2
BEN LOMOND TRAIL BEVAN'S CABIN	600Q	02/26	38	10.2	47.7 22.5 3.8 22.2	16.7
BIG FLAT BIRCH CROSSING	10290	03/02 02/22	36	11.1 13.5	3.8	8.8
BIRCH CROSSING	8100	02/22	44	13.5	22.2	14.5
BLACK'S FLAT-U.M. CK	9400	02/25	22 32 26	5.0	3.7	6.4
BLACK'S FORK	0200	03/01	32 -	7.0	10.8 13.9	9.4
BLACK'S FORK GS-EF		03/01	26	6.8E 6.5	13.9	11.5
BLACK'S FORK GS-EF BLACK'S FORK JUNCTN BOX CREEK BRIAN HEAD BRIGHTON BROWN DUCK RIDGE	8930	03/01	28	6.6	7.G	7.6 7.6
BOX CREEK	9300	02/27	33	7.5		
BRIAN HEAD	10000	02/27	67	7.5 17.1	10.8 14.8 - 28.4 1.0	16.5
BEOMN DUCK DIRECT	8750	02/26	63	17.6		29.3
			63	13.8	28.4	16.9
BRYCE CANYON BUCK FLAT	8000 9800	03/05	18	3.7	1.0	4.6
BUCK PASTURE	9800 9700	02/26	4.0	W.O	18.5	14.8
BUCKBOARD FLAT	2700	03/04	45	10.8	18.0	13.5
BUCK PASTURE BUCKBOARD FLAT BUG LAKE	7950	03/03	60	13.0	18.5 18.0 10.0	10.8
BURT'S-MILLER RANCH	7900	02/20	38	8.9	27.8 5.5	10.0
BURT'S-MILLER RANCH CAMP JACKSON	8600	02/25	40	3.8	5.5	4.6
CASTLE VALLEY	9580	02/27	4.00	10.4	11.8	
CHALK CREEK #1	9100	02/28 02/28 02/28	56	16.3	9.7	11.4
CHALK CREEK #2	8200	02/28	40	10.2	30.7 17 E	18.7
CHALK CREEK #3	7500	02/28	22	5.4	8.3	42.4
CHEPETA	10300	02/28 02/28 03/04	45	15.3 10.2 5.4 9.2	30.9 17.5 8.3 16.6	10-6
CHEPETA-WHITERKS. LK CLEAR CREEK MEADOWS	10350	03/04 2/27 02/27	47	9.2 13.8 8.6 7.3 3.1	16.6 16.2 24.0	12.6
CLEAR CREEK RIDGE #1	9420	2/27	58	13.8	24.0	19.3
CLEAR CREEK RIDGE #2	8000	02/27	37	8.6	24.0 21.3 13.6 7.8 13.7	16.2
CLEAR CREEK RIDGE #3	6600	02/27 02/26	32	7.3	13.6	12.3
		02/20	14 18	3.1	7.8	7.5
DANIELS-STRAUBERRY	8000	02/27	21	3.4	13.7	8.9
DESERET PEAK DILL'S CAMP DONKEY RESERVOIR DRY BREAD FOND	9250		~ T	0.3	20.6	12.9
DILL'S CAMP	9200	02/26	32	5.6	13.2	22.2
DONKEY RESERVOIR	9800	02/27				
DRY BREAD FOND	8350	02/26	25	5.6	24.0	16.0
DUCK CREEK R.S. EAST SHINGLE LAKE EAST WILLOW CREEK FARMINGTON CANYON FARMINGTON CANYON	8700	03/01	-	9.8E	6.2 24.0 10.8	11.8
EAST MILLOW COLCR	9800	03/04	51	14.3	_	22.8
FARMINGTON CANVON	8250	03/02	27	14.3	-	2.9
FARMINGTON CANYON L.	6000 60E0	02/26 02/26	57	16.4	35.1	26.1
FARNSWORTH LAKE		02/25				20.0
FISH LAKE	8700	02/25	60 23	15.7	13.6	15.5
FIVE POINT LAKE	11000	03/04	54	5.0 12.4	8.2	7.4
G.B.R.C. HEADQUARTER	3700	02/26	40	10.1	20.2 16.1	13.1
G.B.R.C. MEADOWS	10000	02/26	55	13.3	22.3	14.2
GARDEN CITY SUMMIT	7600	02/26	28	5.6	24.9	20.0 15.4
GEORGE CREEK	8840	2/27	54	12.4	23.2	- TO 5 4
GOOSEBERRY R.S.	8000	02/25	36	8.6	8.6	10.1
HARDSCRABBLE HARRIS FLAT	6700	02/26	3 <i>6</i>	9.6	23.0	17.0
HAYDEN FORK	7700	02/27	26	6.1	7.0	7.9
LIPSIPALE MARKET	9400	02/28	36	9.3	18.8	12.9
HEWINTA G.S.	10000 9500	03/04	40	10.8	13.2	11.3
HOLE-IN-THE-ROCK	9600 9150	03/01 02/28	31	7.7	9.5	7.5
HOLE-IN-THE-ROCK GS	8300	V4/48	25	5,2	5.8	4.5
HICKERSON PARK	9100	02/28	32	. 7	-	2.3
HOBBLE CREEK SUMMIT	7420	02/27	25	6.7 5.6	6.4	5.5
HORSE RIDGE	9260	02/26	40	10.4	18.4 30.3	12.9
HUNTINGTON-HORSESHOE	9800	02/26	46	13.0	27.5	18.9 21.3
						See A. S. C.

### SNOW MEASUREMENT DATA (cont.)

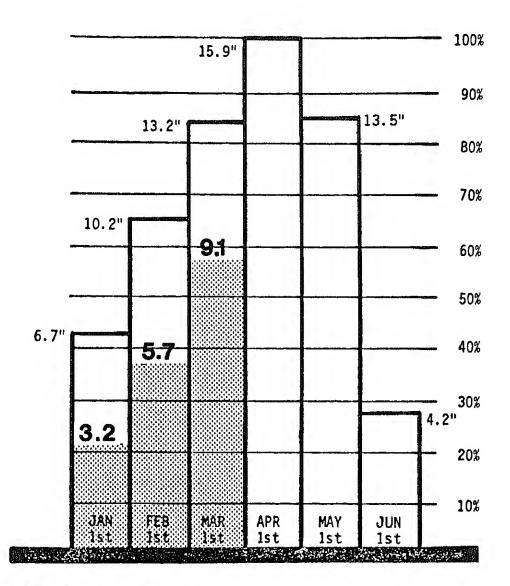
SNOW COURSE	ELEV.	DATE		CONTENT		1961-85
INDIAN CANYON	9100	02/26	38			
INDIAN CANYON JOHNSON VALLEY	8850	02/25	17	3.2	18.4 6.8 18.0 14.7	6.4
KILFOIL CREEK	7300	02/26	34	8.0 11.7	18.0	12.5
KIMBERLY MINE (UPPER)		02/22	47	11-7	14.7	13.1
KING'S CABIN (UPPER)		03/01	30 38	6.7 9.1 9.2	_9.8	8.5 17.4
KLONDIKE NARROWS KOLOB-CRYSTAL	7400 9250	02/26	38	9.1	27.0	17.4
LAKEFORK BASIN	11100	02/22	33 E2	9.2 10.9	15.6 20.2	17.4
LAKEFORK MOUNTAIN #1		02/28			17.6	9.4
LAKEFORK MOUNTAIN #3		02/28 02/28	21	3.4	17.6 12.1	5.7
LAMES CANYON	7400	03/02 02/26	40	11.3	13.4	14.2
LASAL MOUNTAIN LOWER	8800	02/26	36	8.9	6.2	7.8
LASAL MOUNTAIN (UPP)		02/26	68	18.1 15.2	14.6	12.6
LIGHTNING LAKE	10500	03/04	69	15.2	23.5	19.8
LILY LAKE LITTLE BEAR (LOWER)	9050	02/28 02/26	39 27	10.1	15.4 10.5	11.9
LITTLE BEAR (LUMER)	6000 6880	02/26	27	6.7	10.6	9.5
LITTLE BEAR (UPFER) LITTLE GRASSY CREEK	6550 6100	02/22	31	7.7	16.3	11.2
LONG ELAT	2000	02/22	20	7.7 .0 5.4 1.5	3.0	4.0
LONG VALLEY JCT.	7500	02/27	11	1.5	3.2 0.0	6.0
LOST CREEK RESERVOIR		02/26	14	3.4	7.8	5.8
MAMMOTH-COTTONWOOD		02/26	14 39	9.3	7.8 27.5	18.4
MERCHANT VALLEY (UP)	8750	02/22	24	6.4	13.3	10.5
MIDDLE BEAVER CREEK	8650					3.6
MIDDLE CANYON	7000	03/02		13.4		11.7
MIDWAY VALLEY	9800	02/27	60	14.3	18.7	18.1
MIDWAY VALLEY MILL CREEK MILL D SOUTH FORK	7000 9800 6950 7400	02/27	48	12.9	17.2	16.3
MONTE CRISTO P S	7400 8940	02/2/	44 41	12.6	16.6 28.4	17.2 21.6
MOSRY MOUNTAIN(IOW)	9500	03/01	30 41	5.4	28.4 15.6	21.6 8.2
MT.BALDY R.S.	2500	02/26	30 <b>5</b> 5	13.3	24.5	
MONTE CRISTO R.S. MOSBY MOUNTAIN(LOW) MT.BALDY R.S. MUD CREEK #2	8600	02/26	40			
MUD CREEK #2 OAK CREEK ONE MILE SUMMIT OTTER LAKE PANQUITCH LAKE	7760	02/22	40 20	7.6 4.8	18.5 10.5	11.9 11.4
ONE MILE SUMMIT	7330	2/27	175	20.1	F. 1	6.0
OTTER LAKE	9600	02/22	31	8.2	17.5	11.6
PARADISE PARK	8200	02/27	23 40	4.5	1.8 17.0	4.6
PARADISE PARK PARLEY'S CANYON SUM.		03/01		10.6	17.0	11.2
PAYSON R.S.	8050	02/22	43 43	12.2 10.6	17.7 14.1 11.9	16.0 16.6
PICKLE KEG SPRING PINE CANYON	2600	02/25	39	9.0	11.9	
PINE CANYON	8000	02/26	39 39	9.8	24.2	17.4
PINE CREEK	8800	02/22	46		12.3	
REDDEN MINE LOWER	8500	02/28	46 37	10.2	22.1	15.2
RED FINE RIDGE REES'S FLAT	9200			9.9		15.0
REES'S FLAT		02/22	22	6.5	11.6	11.2
REYNOLDS PARK	10400	03/04	60	13.2	19.2	13.8
ROCK CREEK ROCKY BASIN-SETTLEMT	7900 8900	02/28 03/02	22 60	3.2 18.4	15.2	6.8
SEELEY CREEK R.S.	10000	02/26	40	9.2	18.8 16.7	23.4 14.4
SERGEANT LAKES	8300	03/04	36	9.4	26.9	14.5
SHINGLE MILL	6200	03/02	21	5.3	2.4	7.8
SILVER LAKE(BRIGHT.)	8730	02/27	54	14.4	28.4	20.6
SMITH & MOREHOUSE	7600	02/28	30	7.8	14.8	11.4
SNOWBIRD GAD VALLEY	9700	03/04	79	27.4	42.0	28.1
SOAPSTONE R.S.	7800	03/01	<del>-</del>	8.0E	16.9	11.1
SPIRIT LAKE	10300	02/28	50	13.0	10.9	10.1
SOUAW SPRINGS	9300	02/25	21	3.8	7.2	6.6
STEEL CREEK PARK	10100	03/01	51	13.9	17.4	12.9
STILLWATER CAMP STRAWBERRY DIVIDE	8550 8400	02/28	31 35	6.8 7.4	12.3	8.6
STUART R.S.	7950	02/27 02/26	26	7.4 4.2	22.1 14.1	17.0 7.4
SUSC: RANCH	8200	02/25	23	5.3	5.0	7.7
TALL POLES	8800	03/05	42	9.5	8.8	12.2

### SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNÓW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
THAYNES CANYON	9200	03/03	50	13.5	23.5	-
THISTLE FLAT	8500				-	13.8
TIMPANOGOS DIVIDE	8140	02/27	40	11.1	31.7	22.0
TONY GROVE LAKE	8400	02/26	54	14.3	43.8	30.9
TONY GROVE R.S.	6250	02/26	22	5.3	15.8	11.1
TRIAL LAKE	9960	02/28	48	13.4	35.3	20.6
TROUT CREEK	9400	03/01	36	7.8	10.5	8.5
UPPER JOES VALLEY	8900	02/27	32	6.2	12.7	9.6
VERNON CREEK	7500	03/01	-	4.9E	13.9	10.1
VIPONT	7670	2/27	34	7.4	18.8	13.4
WEBSTER FLAT	9200	02/22	29	7.1	12.1	15.0
WHITE RIVER #1	8550	02/26	31	5.1	17.3	11.9
WHITE RIVER #3	7400	02/26	15	3.6	8.1	7.9
WIDTSOE-ESCALANTE #3	9500	02/27	65	13.6	9.2	9.4
WRIGLEY CREEK	9000	02/26	39	6.6	12.9	9.8
YANKEE RESERVOIR	8700	02/25	42	9.5	5.8	8.0

# **Utah Snowpack Progress**

### 1987

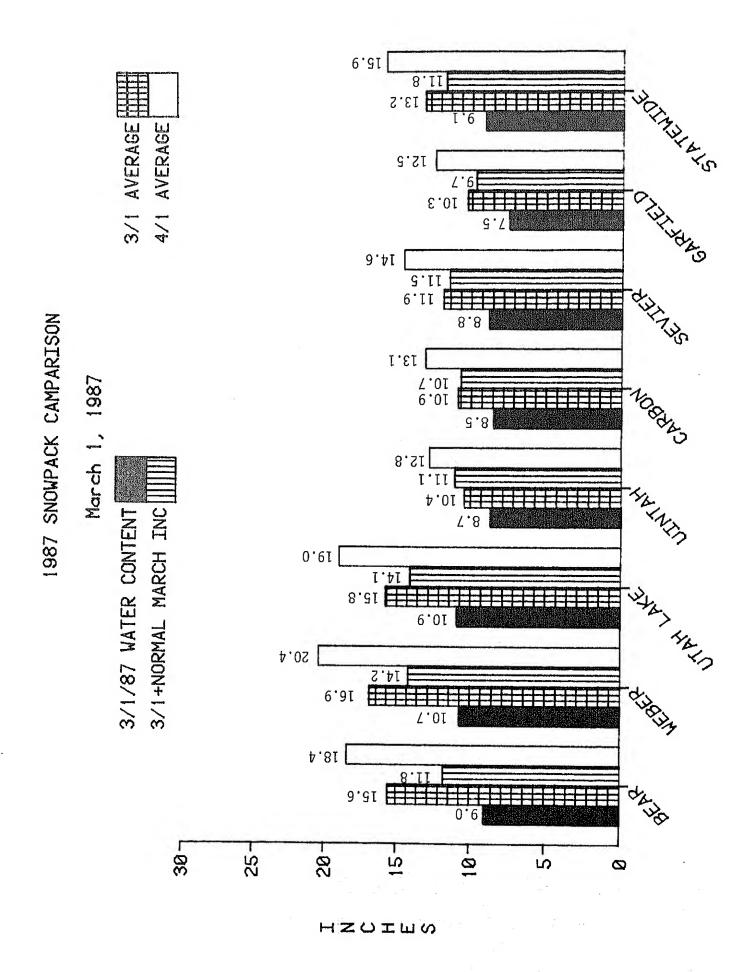


### **Statewide**

#### NOTE:

Snow water equivalent in inches is compared to the highest seasonal amount ( 100% ). Monthly averages are accumulated by basin/state.

Averages are for the period 1961-1985.



# The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

#### State

Utah State University
Utah State Department of Natural Resources
Division of Wildlife Resources
Division of Water Resources
Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

#### Federal

- U.S. Department of Agriculture Soil Conservation Service Forest Service
- U.S. Department of Commerce NOAA, National Weather Service
- U.S. Department of Interior
  Bureau of Reclamation
  Geological Survey
  National Park Service

#### Municipality

Manti Salt Lake City

#### **Public**

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Central Utah Conservancy District
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association
Weber River Water Users Association
Weber Basin Conservancy District

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

All programs and services of U.S. Dept. of Agriculture are available to everyone without regard to race, creed, color, sex, age, handicap, or national origin.